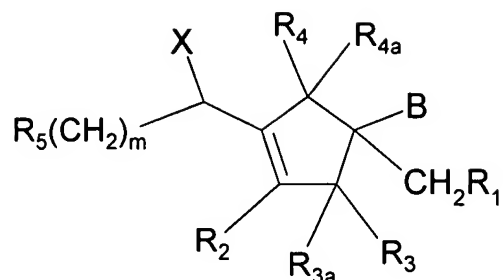
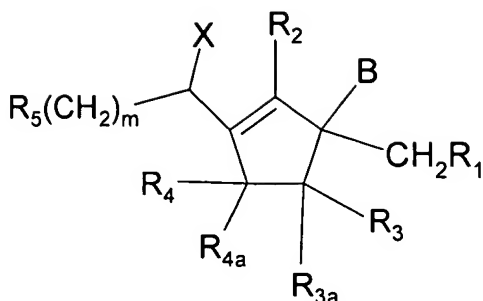


# Abstract of the Disclosure



$R_1$  is chosen from  $C_{1-4}$ alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, aryl, substituted aryl, H,  $OR_9$ ,  $N_3$ ,  $NR_9R_{9a}$ ,  $CO_2R_9$ ,  $SR_9$ , with the exception wherein  $R_1$  is OH

$R_2$  is selected from the group of H, halogen,  $N_3$ ,  $(CH_2)_mR_5$ ,

$R_3$  and  $R_{3a}$  are individually chosen from the group consisting of H, OH, halogen, CN,  $NO_2$ ,  $N_3$ ,  $SR_9$ ,  $SO_2R_9$ ,  $(CH_2)_mR_5$

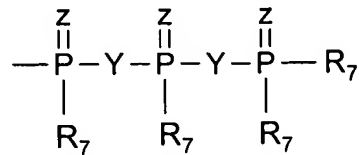
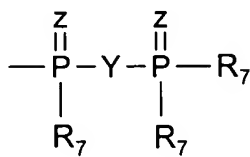
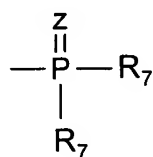
$R_4$  and  $R_{4a}$  are selected from the group of H, OH, Halogen, CN,  $NO_2$ ,  $N_3$ ,  $SR_9$ ,  $SO_2R_9$ ,  $(CH_2)_mR_5$

$X$  is selected from the group of H, OH, CN,  $NO_2$ ,  $N_3$ , halogen

Both  $X$  and  $(CH_2)_mR_5$  together can be  $=O$ ,  $=N-OH$

$R_5$  and  $R_{5a}$  are selected from the group of H,  $OR_9$ ,  $NR_9R_{9a}$ ,  $C(O)NR_9R_{9a}$ ,  $R_9$ ,  $R_6$ ,  $OR_6$ ,  $CO_2R_9$ ,  $C(O)R_9$ ,

$R_6$  is chosen from :



$R_7$  is selected from the group consisting of H, F,  $SR_8$ ,  $OR_8$

$R_8$  is chosen from the group of H, alkyl, alkenyl, alkynyl, aryl, and hydroxyprotecting group,

$R_9$  and  $R_{9a}$  are independently selected from the group of H, alkyl, alkenyl, alkynyl, and aryl

Y is chosen from  $CH_2$ ,  $CF_2$ , CHF, and O,

Z is chosen from O, S,

B is selected from the group of purine, pyrimidine and heterocycle m is 0, 1, 2, 3, or 4 and pharmaceutically acceptable salts thereof and prodrugs thereof.